Robotic Water Blasting Facility

Purpose:

To clean surfaces with automated high-precision and high-pressure streams of water.

This facility, located in the National Center for Advanced Manufacturing (NCAM) of Building 4707, possesses the capability to direct a powerful spray with high precision and accuracy to remove contaminates and corrosion and also selectively remove coatings such as paints, adhesives, ablatives, insulations, etc. from many different substrate types having simple or complex geometries. This automated facility features two high pressure Hammelmann pumps, one capable of delivering 32 GPM of water at 20,000 psi and another capable of delivering 13 GPM of water at 36,000 psi. From a pump room these systems feed high pressure water to any one of various nozzles, including straight, angled or rotating (up to 2,000 rpm), located within an isolated blast room. The blast room houses an automated delivery system, one of two turntables (14' diameter and a 6' diameter), a waste collection system (capable of filtering hazardous waste), remote operated camera for displaying and recording, and a high volume air exchange unit. Operation can take place manually but usually takes place remotely from a sound attenuated control room.

Point-of-Contact:

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